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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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12/10/2001

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EXAMINER

WOZNIAK, JAMES S

ART UNIT

PAPER NUMBER

2626

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/020,343	<b>Applicant(s)</b> BERGSTRAESSER ET AL.	
	<b>Examiner</b> James S. Wozniak	<b>Art Unit</b> 2626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 66-85 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 66-85 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In response to the office action from 9/5/2007, the applicant has submitted a request for continued examination, filed 10/29/2007, canceling claims 46-65, while adding claims 66-85 and arguing to traverse the art rejection based on the limitations regarding the reception of a dictionary from a server and a context including document type and user role (*Amendment, Pages 7-8*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Yamaguchi et al (*U.S. Patent: 5,734,889*), Shanahan et al (*U.S. Patent: 6,732,090*), and Kimura (*U.S. Patent: 6,282,508*).

2. In response to the cancellation of claims 46-65, the examiner has withdrawn the previous claim objections, 35 U.S.C. 101 rejections, and 35 U.S.C. 112, first paragraph rejections.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 66-71, 73-79, and 81** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (*U.S. Patent: 5,734,889*) in view of Shanahan et al (*U.S. Patent: 6,732,090*) and further in view of Kimura (*U.S. Patent: 6,282,508*).

With respect to **Claim 66**, Yamaguchi discloses:

A dictionary that includes a correspondence between linguistic components and contexts with their associated actions (*database, Fig. 1, Element 5, that relates natural language input information and particular document action data through correlation data such as context and domain, Col. 5, Line 41- Col. 6, Line 27*);

Receiving from a user text entry via an input device into the document of a document type, the document being opened by the application executing on the client computing device (*document of a specific type, Figs. 1-5, functioning in software on a computer system, into which a user can input a natural language (NL) text entry, Col. 4, Lines 10-39*);

Parsing the text entry to identify a linguistic component (*performing syntax, context, and domain analysis to segment a NL text input, Col. 5, Lines 19-63*);

Identifying from the dictionary an action associated with the identified linguistic component and contexts, the action being specific to the linguistic component and context (*searching the database to retrieve specific document action content based on the linguistic processing results, Col. 5, Line 41- Col. 6, Line 50*), wherein the dictionary includes indications of different actions to be performed on a document for a linguistic component for different contexts (*actions based on context information, Col. 5, Line 41- Col. 6, Line 50; and example of a "company" component specific to different address/telephone number components, Fig. 6*); and

Performing the identified action on the document to exhibit a behavior in the document  
(*action is recorded in the document, Col. 6, Lines 46-50*).

Although Yamaguchi discloses that document actions can be retrieved based on NL components and context and further notes that database entries can be correlated to multiple types of data (*Col. 6, Lines 20-27*), Yamaguchi does not disclose that context information includes document type and user role. Shanahan, however, discloses a method/system for auto-completion of user text entries within a document using context information including user identity (*such as access and privileges*) and document classification (*Col. 56, Lines 12-36; and Col. 58, Lines 25-59*).

Yamaguchi and Shanahan are analogous art because they are from a similar field of endeavor in text document completion using context information. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi with the user identity and context information taught by Shanahan in order to better anticipate the information needs of a user (*Shanahan, Col. 56, Lines 22-36*) and reduce an information search space (*Shanahan, Col. 59, Lines 1-10*).

Although Yamaguchi discloses the database relating NL components and context (*Fig. 1, Element 1*), Yamaguchi in view of Shanahan do not teach that this database is accessible to multiple client devices via a server download. Kimura, however, discloses the concept of storing a centrally maintained dictionary at a server, where it can be downloaded to client computing dictionary-using devices (*Col. 1, Lines 53-56; and Col. 4, Lines 35-62*).

Yamaguchi, Shanahan, and Kimura are analogous art because they are from a similar field of endeavor in text processing utilizing database information. Thus, it would have been

obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi in view of Shanahan with the dictionary management concepts taught by Kimura in order to provide a means for easily keeps a device dictionary database updated (*Kimura, Col. 1, Lines 49-52*).

With respect to **Claim 67**, Yamaguchi discloses the database used for document completion, Shanahan discloses the document classification used to determine a document completion action, and Kimura discloses a database centrally managed at a server, as all applied to Claim 66.

With respect to **Claim 68**, Shanahan further discloses:

When a parsed linguistic component does not uniquely correspond to a linguistic component with a correspondence to an action, displaying an indication of multiple linguistic components, receiving from the user a selection of one of the multiple linguistic components, identifying from the dictionary an action associated with the selected linguistic component, and performing the identified action on the document (*providing similar completion results to a user for selection and subsequent entry into a document, Col. 59, Lines 11-34*).

With respect to **Claim 69**, Shanahan discloses the document classification utilized for document completion, as applied to Claim 1, while Yamaguchi discloses multiple document types as different spreadsheet templates (*Figs. 2-4; and Col. 4, Lines 10-25*).

With respect to **Claim 70**, Yamaguchi further discloses:

The context further includes an indication of the application that has the document open (*NL sentences are defined in a context pertaining to particular table applications (i.e., address, business results, etc.), Col. 4, Lines 10-53*).

With respect to **Claim 71**, Shanahan further discloses:

Context further includes an indication of the user (*user name, Col. 56, Lines 12-36*).

With respect to **Claim 73**, Kimura further discloses:

The server computing device provides the dictionary to multiple client computing devices (*the server updates a dictionaries in a plurality of client language processing systems, abstract; and Col. 1, Lines 53-56*).

**Claim 74** contains subject matter similar to Claim 66, and thus, is rejected under similar rationale. Also, Yamaguchi further discloses: a sentence input means (Col. 4, Lines 26-39), a data retrieving device (*Col. 3, Line 65- Col. 4, Line 2*) that displays documents for a user (*Figs. 2-5*) which would inherently require some type of display means, and method implementation as software running on a computing device which would inherently require some type of memory for storing the program and some type of processor so that the software can be implemented (*Col. 4, Lines 10-25*).

**Claims 75-79** contain subject matter respectively similar to claims 67-71, and thus, are rejected under similar rationale.

**Claim 81** contains subject matter similar to Claim 81, and thus, is rejected under similar rationale.

5. **Claims 72 and 80** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Shanahan et al in view of Kimura and further in view of de Hita et al (*U.S. Patent: 6,081,774*).

With respect to **Claim 72**, Yamaguchi in view of Shanahan and further in view of Kimura teaches the method/system for performing document actions as applied to Claim 66. Yamaguchi in view of Shanahan and further in view of Kimura does not specifically suggest specifying synonyms for a linguistic element, however de Hita discloses a dictionary creation means for associating semantic (*synonym*) and syntactic data with a linguistic element (*token*) (*Col. 3, Lines 1-20; and Col. 11, Lines 8-56*).

Yamaguchi, Shanahan, Kimura, and de Hita are analogous art because they are from a similar field of endeavor in text processing utilizing database information. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi in view of Shanahan and further in view of Kimura with the dictionary creation means taught by de Hita in order to ensure proper representation of a text's content (*de Hita, Col. 2, Lines 9-20*).

**Claim 80** contains subject matter similar to Claim 72, and thus, is rejected under similar rationale.

6. **Claim 82** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (*U.S. Patent: 5,734,889*) in view of Kimura (*U.S. Patent: 6,282,508*).

With respect to **Claim 82**, Yamaguchi discloses the document action client device, while Kimura discloses the central server dictionary maintenance/distribution means, as both applied to claim 1. Kimura also discloses an interface for maintaining the dictionary and receiving dictionary requests (*upload/download server interface, See Figs. 4A and 4B*).



Yamaguchi and Kimura are analogous art because they are from a similar field of endeavor in text processing utilizing database information. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi with the dictionary management concepts taught by Kimura in order to provide a means for easily keeps a device dictionary database updated (*Kimura, Col. 1, Lines 49-52*).

7. **Claims 83-84** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al (*U.S. Patent: 5,734,889*) in view of Kimura (*U.S. Patent: 6,282,508*) and further in view of Shanahan et al (*U.S. Patent: 6,732,090*).

With respect to **Claim 83**, Yamaguchi in view of Kimura discloses the document action system having a dictionary maintained at a server, as applied to Claim 82. Yamaguchi in view of Kimura does not specifically suggest providing multiple linguistic alternatives to a user for selection as recited in claim 83, however, Shanahan discloses such a providing means as applied to Claim 68.

Yamaguchi, Kimura, and Shanahan are analogous art because they are from a similar field of endeavor in text document completion using context information. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi in view of Kimura with the user identity and context information taught by Shanahan in order to better anticipate the information needs of a user (*Shanahan, Col. 56, Lines 22-36*) by providing additional matches (*Shanahan, Col. 59, Lines 35-45*).

**Claim 84** contains subject matter similar to claim 66, and thus, is rejected under similar rationale.

8. **Claim 85** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Kimura in view of Shanahan et al and further in view of de Hita et al (*U.S. Patent: 6,081,774*).

With respect to **Claim 85**, Yamaguchi in view of Kimura and further in view of Shanahan teaches the method/system for performing document actions as applied to Claim 84. Yamaguchi in view of Kimura and further in view of Shanahan does not specifically suggest specifying synonyms for a linguistic element, however de Hita discloses a dictionary creation means for associating semantic (*synonym*) and syntactic data with a linguistic element (*token*) (*Col. 3, Lines 1-20; and Col. 11, Lines 8-56*).

Yamaguchi, Shanahan, Kimura, and de Hita are analogous art because they are from a similar field of endeavor in text processing utilizing database information. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Yamaguchi in view of Kimura and further in view of Shanahan with the dictionary creation means taught by de Hita in order to ensure proper representation of a text's content (*de Hita, Col. 2, Lines 9-20*).

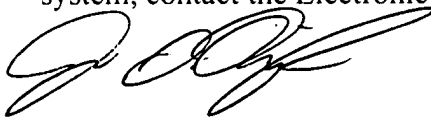
### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See PTO-892.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached at (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



James S. Wozniak  
1/3/2008